

THE
LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, OCTOBER 3, 1885.

Original.

THE ETIOLOGY AND TREATMENT OF
NEURALGIA.*

BY ROBERT C. KENNER, M. D.

The causes of neuralgia are constitutional and exciting. Among the causes favoring the development of this disease, malaria is probably the most common. This result of the action of this poison on the system manifests itself in periodical exacerbations of pain. Practitioners in the South and West see a large number of such cases in persons residing in the neighborhood of swamps and lowlands, and other places where this poison is generated, in which there is, beside well-marked paroxysmal periodicity, a furred tongue, loss of appetite, general *malaise*, with increasing debility and other symptoms usually regarded as due to malarial poisoning. Without therapeutical interference the paroxysms recur at shorter intervals with increased severity, while often a malarial fever will develop coincidentally. I have frequently seen an intermittent or remittent fever with co-existent neuralgia. It is the most common thing to see neuralgia following the lowered health stamina of recovery from intermittent, remittent, and typho-malarial fevers and dysentery. It is an intercurrent affection in the course of anemia, chronic pulmonary tuberculosis, chronic bronchitis, syphilis, scrofula, malignant tumors, and cancer. Typhus and typhoid fevers, rheumatism, pneumonitis, and, in fact, all diseases which lower the vital forces, permanently or transiently, may be followed by its establishment, which persists until the system regains its former standard of health. And Prof. William A. Hammond cites, among the causes, the

loss of blood, as in the case of women after childbirth, or from menorrhagia, prolonged lactation, and the changes due to the cessation of the menses.

A large number of cases of facial neuralgia have their origin in carious teeth, or disease of the superior or inferior maxillary bone. Tanner recommends their careful examination in all cases of facial neuralgia whatsoever, and mentions several of the most intractable cases the result of exostosis of the jaw, decayed teeth, and thickening of the periosteum of the fangs.* And again, neuralgia may owe its dependence to the pressure of a tumor on the nerve trunk, or a tumor of the nerve itself, or to a cicatrix from an old neuritis. Professor Alfred L. Loomis very properly regards it as hereditary in those of neuropathic tendency.

It is affirmed by several observers that this disease is more frequently seen in females than in males, and that the intercostal form occurs more frequently in the former, while sciatica is its most common expression in the latter, which observation is borne out by notes of my cases.

The point of its etiology on which I am anxious to lay particular stress is, that it is a disease of lowered vitality. That in all cases its existence is a proof of the presence of some morbid condition, the influence of which depresses the system in a local or general way. This may be one of the results of a cancer, or the outgrowth of temporary derangement of the system caused by pneumonia.

Of course, I would exclude from this generalization those forms of neuralgia caused from pressure of tumors, decayed teeth, and all of those which come within the field of surgical or dental observation.

The study of a large number of cases covering the ground of its forms has fully

*Read at the September Meeting of the Muhlenberg (Ky.) County Medical Society.

*Tanners Practice of Medicine, Philadelphia, 1867, page 316.

convinced me that under the light of the above-named theory of causation only, can we fix our treatment upon a basis which will be rational or successful. The researches of the best observers in the field of nervous diseases seem to imply this doctrine of its cause. Romberg may be said to have anticipated it, when he said: "It seems as if pain were the prayer of the nerve for healthy blood."

Those influences which temporarily depress or unduly excite the nervous system, such as exposure to cold and damp, mental excitement, overstudy, or exposure to the excessive heat of the sun, or sudden changes of temperature, as is experienced in going from heated apartments into the open air, make up what we understand to be the *exciting causes*.

The treatment of neuralgia comprises the use of *topical applications*, the *internal administration of palliative remedies*, and *measures directed to the correction of the constitutional disorder on which it is a dependent*.

Local applications over the seat of pain, whether we desire to provide counter-irritation or to obtain the local anodyne effect of some drug, form a useful auxiliary to our efforts at palliation.

Blisters in some forms of neuralgia are very useful. In sciatica, and the intercostal form in particular, they have conduced largely to the comfort of the patient and signally aided in producing the desired result. Several small blisters, about the size of a half-dollar, scattered over the painful surface, or along the course of the nerve as in sciatica, or one large enough to encompass the painful surface, is the manner in which I employ them. When a blister is for any reason not thought advisable, the irritant effect of croton oil answers our purpose often times very well. Ammonia liniment will be found extremely serviceable in all those cases where neither blister nor vesicants are desirable and a reliable rubefacient is what we desire. My experience has led me to consider blisters and vesicants as useful only in the severe forms of this disease, where the pain is extended over a comparatively large area of surface or along the course of a nerve, and they are the only measures sometimes which seem to afford us any good effect. On the other hand, ammonia liniment in all the mild forms of neuralgia renders us exactly what is required in a local application. Tincture of iodine is some times useful. Aconite liniment, claimed by many

to be the best local anodyne, certainly affords us here an efficient agent. The tincture of aconite in my hands, applied over the painful surface, has been followed by equally good effects. Chloroform, camphor, and belladonna liniments, or fluid extract of hyoscyamus, or tincture of opium, form excellent applications, of service in quite a number of cases. Poultices and bags of hot salt occasion often a most desirable anodyne effect. My experience in acupuncture is limited, and not such as would encourage a more extended trial.

The most reliable internal agent we have for palliation of the pain is opium. The hypodermic injection of morphia, or its administration *per os*, is above all other remedies to be relied on. The unpleasant, after effects of opium and the danger of the establishment of its habitual use have constrained me to use it only when other remedies were inadequate. In the very severe forms of the disease its use is imperative, but it is always advisable to dispense with it so soon as it can be done without great discomfort to our patient. In this endeavor I have largely been successful in the use of several of our anodyne medicines. The bromides of sodium and potassium form useful adjuncts to the palliative treatment, when opium is to be discontinued, or given at the beginning of an attack not marked by such excruciating pain as to imperatively demand opium, are often followed with the best results. I have very frequently carried patients through an attack of several days with no other anodyne than the bromide of sodium, without their experiencing any great amount of pain. Because of the milder systemic effect of the bromide of sodium, I prefer it to the bromide of potassium, and order it in doses of \mathfrak{Dj} and \mathfrak{Zss} , from four to six hours apart or oftener, to keep up the sedative influence. I have found it capable of keeping the pain in subjection long enough to neutralize or remove the cause of the disorder. Belladonna, in facial and other forms of neuralgia, which are complained of more as an ache giving annoyance, with increasing severity, has been sufficient in many cases to entirely relieve the sufferer. In doses of from four to eight drops of the fluid extract, repeated every two hours until dilatation of the pupils, has answered my want for a substitute for opium often in an admirable way. It is one of our old remedies which has stood the test of years, and is worthy of our confidence. Hyoscyamus being similar in its

therapeutical qualities to that of belladonna, and the dose somewhat larger, I have not used it sufficiently to determine whether it possesses any superiority over the latter or not. Camphor is an effectual remedy in a number of cases, and where opium was contra-indicated I have seen advantageous results.

Aconite has long enjoyed a reputation in the treatment of this disease, and is occasionally of signal worth. It being a cardiac sedative of great power, is, of course, contra-indicated where the constitutional powers are greatly lowered, or where there is from any cause feebleness of the heart's action. Its use in several of my cases has yielded the happiest results. The inhalation of chloroform is a palliative of great utility, and in some cases positively demanded. In those aspects of the disorder where life seems threatened from actual pain, or in those cases where it is not advisable to await the action of anodynes, seem to me to be the only indications for its use. Several authorities might be quoted to warrant its use in a larger field of cases, but the effects obtained are of short duration and attended with danger. I believe that the above circumstances will prove to be those only in which it is advisable. My experience with chloral hydrate has convinced me that it is a most unreliable agent, and especially valueless in neuralgia. Topga, introduced to the notice of the profession some years ago by Drs. Ringer and Murrel, has proved itself to be a remedy of considerable merit, and is worthy of more extended use. Its virtues are, however, only those of an anodyne. Conium is a drug which is also useful in some cases, and in combination with several remedies of its class is of especial value. In fact, the combining of anodynes seems in some cases to enhance their efficacy. The formula of the neuralgic pill of the late Prof. Gross is an example of the combination of similar remedies, and is a good prescription in many cases. So, also, is that of Brown-Sequard.

Remedies addressed to the *constitution* will, of course, consist of those applicable in the treatment of the disorder which has produced the diseased conditions favorable to the development of the neuralgia.

Quinia is a remedy which it is always safe to give in those cases where the cause is obscure, and when it is clearly malarial it is almost a specific. Some forms, however, yield only to arsenic. Ferruginous tonics are always applicable and necessary

in the malarial form, and often a cure is not effected until the patient has removed to a more healthy climate.

Electricity in a given number of cases is an agent of great utility.

Malt, cod-liver oil, phosphorus, general tonics, and so forth, will all come in for consideration in our treatment of the constitutional derangement, which is always a key to the therapeutical indications.

I have not considered surgical procedures, since they have no direct bearing upon the chief topic herein discussed.

SOUTH CARROLLTON, KY.

Miscellany.

HOW PHYSICIANS ARE TREATED IN SPAIN. Apropos of the superstitious ignorance of the Spanish people that has caused them to antagonize the efforts of sanitarians in their behalf, and that has cost them already the lives of some 80,000 persons, the Medical and Surgical Reporter notes the following from the *Moniteur Universelle*:

At Puebla Larga, a suburb of Barcelona, a man died of cholera recently. The relatives of the deceased gave no notice of his death, but concealed the fact from their nearest neighbors. When the attendant physician made his morning call he found all of the family in an outer chamber, apparently as happy and jovial as usual. He was invited by one of them to step in and see the patient. He did so, and, on approaching the bedside and finding him dead, was about to retire, when he found himself surrounded by the relations, whose smiles were now turned into scowls and threatening visages. The head of the family was the first to speak. Pointing to the dead man, he exclaimed: "It is thus that you do the work we pay you for. You promised to save him—see the result."

The others chimed in, calling the doctor an assassin and a murderer, and one said: "This is the third one you have slain in eight days, miserable assassin that you are!"

While this was going on, the whole crowd had gathered close around the doctor, the men shaking their fists in his face and spitting upon him. Suddenly, with a cry, the wife of the dead man leaped upon the physician, while the others seized the remnants of the medicines which he had ordered for the patient, and commenced to force them down his throat. The doctor strug-

gled, but was powerless against numbers, and was not released until every drop of the potions, the draughts, the clysters, every pill and powder had gone down his throat.

For twenty minutes the unfortunate physician was thus held and tortured, and when he was finally released by his savage captors and allowed to depart, he was more dead than alive.

In less than one hour from the moment of leaving the house, he was a corpse. The father of the victim, an old man and in poor health, took to his bed on the death of his son, and in two days, he, too, was no more.

The affair has created an intense feeling among the physicians, and the Medical Institute, having been called together, is now considering what course shall be taken in order to protect physicians from the blind ignorance, fanaticism, and fury of the populace in such cases.

TOXIC EFFECTS OF COCAINE.—Dr. J. K. Bauduy, of St. Louis, in an interesting article on Cocaine in Melancholia (New York Medical Journal) gives the following as the toxic effect of this drug:

Too frequently repeated medicinal doses, or very large quantities of the drug injected subcutaneously at once, produce results alarming both to the subject and to the spectators. The entire surface becomes pale and covered with perspiration; the pupils dilate gradually and are insensible to light; profound nausea, but no vomiting, follows; the muscles of mastication become more or less rigid and affected with clonic contractions, this effect being produced only among the earlier physiological and toxic effects; there are violent grating and gnashing of the teeth, so that small portions of the enamel are ground off. Tonic contractions of the same muscles (trismus) are sometimes observed, but exceptionally. The eyes assume a fixed, wild, staring gaze that is as characteristic as it is indescribable. There is ceaseless jactitation, with a sensation of wild nervousness that is almost unbearable. There is voluminous loquacity, an extraordinary fluency of speech, the volubility of which must be witnessed to be credited. Excitations of the sexual propensities, one rapidly succeeding the other with astonishing celerity, of a teasing character, are generally observed. Superadd to these phenomena visual and auditory hallucinations and illusions of

the most painful character, and you have a conception of the clinical characteristics of acute cocaineism. I do not know the lethal dose of cocaine. If given in sufficient quantity, it would doubtless induce epileptiform convulsions, terminating in death from exhaustion.

Chronic cocaineism, or the cocaine habit, presents in an exaggerated form most of the phenomena just described.

EARLY AND SUCCESSFUL LAPAROTOMY OPERATION.—A correspondent of the Journal of the American Medical Association says that the other day, in glancing over a file of old newspapers, the following paragraph was observed. Though meager in details it furnishes conclusive evidence of an early and successful laparotomy operation, by William Baynham, of Virginia. This gentleman was, in his day, one of the most accomplished anatomists and surgeons. He was born in Caroline County, Virginia, December 7, 1749, and died at his residence in Essex County, Virginia, December 8, 1814. After studying with his father, Dr. John Baynham, he went to England to further prosecute his studies. He remained in London, connected with St. Thomas's Hospital and as a practicing surgeon, for sixteen years. On his return to America, which he had left as colonies, they had, in his absence become a nation. He settled to practice his profession in Essex, and to the close of his life had a large and responsible practice. At the date of this operation there were no medical journals published in the United States. He may have reported it to some of the medical societies to which he belonged in London, or later to journals published in America. He did report a case or cases of extra-uterine conception, and this case may be the one. However, as all cases of this kind are of special interest to the surgeon and gynecologist, I venture, at the risk of a duplication, to request you to give it a place in your widely-read and influential journal:

RICHMOND, VA., January 26, 1791.

On Saturday, the 14th inst., Mrs. Locke, wife of Mr. John Locke, of Caroline County, Virginia, was delivered of a dead child, which she had carried for upwards of ten years. The child appeared to have been of the size of a full-grown one of nine months old, and was extracted through an opening made in the side of its mother by Dr. [Wm.] Baynham. We are happy to hear that Mrs. Locke is as well as can be expected after so uncommon and painful an operation, which she is said to have borne with great fortitude.—*The Georgia Gazette, Thursday, March 10, 1791.*

EXPERIMENTAL RESEARCHES ON MICRO-ORGANISMS AS A CAUSE OF DIPHTHERIA IN MAN AND ANIMALS.—Herr Löffler has been carrying out some important investigations with the object of demonstrating the presence of micro-organisms in the diphtheritic membrane, using the following staining solution: Thirty c. c. of a concentrated alcoholic solution of methylen-blue to 100 c. c. of an aqueous solution of caustic potash (1—10,000). It is sufficient to leave sections for only a few minutes in this solution to deeply stain most known bacteria. They are then washed in a half-per-cent solution of acetic acid, dehydrated, clarified in cedar oil, and mounted in balsam. In twenty-seven cases in which the diphtheritic membrane was examined, two definite species of micro-organisms were found—a chain-forming micrococcus and a bacillus. The former was cultivated pure on meat-jelly, blood-serum, and cooked potatoes, and bears a very strong resemblance to the micrococcus of erysipelas, both morphologically, and as regards its mode of growth, but is only of secondary importance with respect to the diphtheritic process. The bacillus could not be grown on meat-jelly or potatoes, but on blood-serum at 37° C. it formed, within three days, whitish, opaque colonies, which did not liquefy the serum. The bacilli are of about the same length as the tubercle bacillus, but about twice as thick; they are generally more darkly stained and slightly thickened at the poles. A definite spore-formation was not observed in the cultivations. A variety of animals were inoculated with the pure cultivation, and in some an appearance was produced at the seat of inoculation, *e. g.*, the formation of a false membrane on the tracheal, conjunctival, and vaginal mucous membranes, which closely resembled the local appearances in man. Herr Löffler also found on the surface of a condyloma a bacillus which possessed a great resemblance, both morphologically and as regards its pathogenic action, to the bacillus of diphtheria of calves, and gave rise to diphtheritic infection of rabbits.—*Medical Press*.

REMOVAL OF PLASTER-PARIS DRESSINGS. Dr. G. Krosz writes to the *Deutsch Med. Zeit.* that the removal of a plaster-of-paris dressing is greatly facilitated by first scraping a groove with a knife, and then dropping along it a solution of caustic soda. In a few minutes the plaster becomes pulpy along this line, and the bandage can then

easily be cut through. If two lateral grooves be made, instead of one, a lid can be cut out of the bandage, the leg can be lifted up for the necessary inspection and returned, the lid being reapplied and retained with a roller bandage. In this way the plaster dressing is not cracked, and the limb is not jolted in the effort to remove the bandage. By this method, also, it is a very easy matter to cut any fenestra that may be needed.—*Ibid*.

MORE RESIGNATIONS FROM THE CONGRESS.—Dr. John C. Dalton has resigned the presidency of the Section on Physiology; Dr. E. Fletcher Ingals, of Chicago, the secretaryship of the Section on Laryngology; Dr. E. L. Shurley, of Detroit, Council of Section on Laryngology; Dr. T. A. McGraw, of Detroit, Council of Section on Surgery; Dr. Thomas M. Markoe, of New York, Council of Section on Surgery; Dr. William H. Welch, of Baltimore, Secretary of Section on Pathology; Dr. Thos. T. Sabine, of New York, Council of Section on Anatomy; Dr. Charles Stedman Bull and Dr. E. G. Loring, of New York, Council of Section on Ophthalmology, and Dr. Thomas F. Rochester, of Buffalo, Council of Section on Medicine.

THE AMERICAN GYNECOLOGICAL SOCIETY.—The following gentlemen have been elected as officers for the ensuing year: Dr. T. A. Reamy, President; Dr. T. Parvin, First Vice-President; Dr. G. J. Engelmann, Second Vice-President; Dr. J. T. Johnson, Secretary; Dr. M. D. Mann, Treasurer; Dr. F. P. Foster, Dr. J. C. Reeve, Dr. B. B. Browne, and Dr. R. B. Maury, Council. The next meeting of the Society will be held in Baltimore, September 21, 22, and 23, 1886.

AMERICAN RHINOLOGICAL ASSOCIATION. The following are the subjects of some of the papers (with the authors' names and addresses) to be read at the third meeting of the American Rhinological Association, to be held at Lexington, Ky., October 6, 1885:

Address to the Association on Rhinology, by the President, P. W. Logan, M. D., of Knoxville, Tenn.

Chronic Otitis Media, its Treatment in Connection with Nasal Disease, by Hiram Christopher, M. D., of St. Joseph, Mo.

Self-Deception, by the same author.

Hypertrophic Rhinitis, its Sequelæ and

Treatment, by J. A. Stucky, M. D., of Lexington, Ky.

Treatment of Catarrh, Acute and Chronic, by A. DeVilbiss, M. D., of Toledo, Ohio.

Treatment of Neoplasms of the Nasopharyngeal Cavity—a New Snare—by J. G. Carpenter, M. D., of Stanford, Ky.

Aural Catarrh and Treatment by Different Methods, with the Theory of each System, by Charles A. S. Sims, M. D., of St. Joseph, Mo.

Chronic Conjunctivitis Dependent upon Intra-Nasal Disease, by N. R. Gordon, M. D., of Springfield, Ill.

Demonstrations (on the Cadaver) of the Nasal and Pharyngo-nasal Cavities, the Pharynx and Larynx; the Sections of the Cadaver will show all the Cavities, Canals, and Sinuses connected with the Nasal and Pharyngo-Nasal Cavities, by Thos. F. Rumbold, M. D., of St. Louis, Mo.

Demonstrations of the Manner of Making Applications by means of the Spray-Producers, the age of the patient being respectively one, three, eight, fifteen, and twenty years and older, by the same author.

Removal of Foreign Bodies and Tumors from the Upper Air-Passages, with Demonstrations on a Phantom Head, by the same author.

Treatment of Pruritic Rhinitis (Hay-fever), by Spray Producers alone—Cases—by the same author.

On the Treatment of Secondary and Tertiary Syphilis of the Larynx, Pharynx, and Mouth, by Jos. B. Payne, M. D., of Hot Springs, Ark.

A few suggestions on Hypertrophy of the Turbinated Processes, by E. F. Henderson, M. D., of Los Angeles, Cal.

Seven other papers are promised, but the subjects have not yet been given to the Secretary.

The full programme will be ready to mail to any address on and after the 23d of September, on application to any of the above members, or to Chas. A. S. Sims, M. D., Secretary, St. Joseph, Mo.

CEREBRO-SPINAL MENINGITIS IN A ROLLER SKATER.—At a meeting of the Brooklyn Pathological Society (New York Medical Journal) Dr. George W. Cushing reported a case and the result of the autopsy in a man aged twenty-eight, who died of cerebro-spinal meningitis. He had been engaged in a roller-skating match, and was much exhausted. The disease rapidly developed, and the man died in four days.

NUSSBAUM treats the small, soft warts which frequently cover the penis, by first washing them twice daily in salt water and afterward sprinkling with calomel. The reaction of the residual sodium chloride and mercurous chloride produces mercuric chloride, or corrosive sublimate. This treatment, he claims, cures the warts rapidly, without causing the least pain or detention from business.—*Medical and Surgical Reporter.*

AN outbreak of typhoid fever recently occurred at Bellevue Hospital, New York. The cause was found to be due to an opening in the pipes emptying into the sewer. These had been opened for repairs and left in this condition for several days. Two nurses, two orderlies, and one of the resident physicians had the disease, but none proved fatal.

AN epidemic of smallpox has been raging in Canada. In Montreal, from the 1st to the 21st of August, 380 cases were reported, with 115 deaths. And for September the death-rate is reported as much greater, 164 dying from September 10th to 12th.

DR. B. W. RICHARDSON, F. R. S., finds a scientific basis for the saying that a cat has nine lives. If a cat and a dog are shut up in the same "lethal chamber," the cat survives on the average three times as long, and in one instance nine times.

DR. W. G. METCALF, superintendent of the Rockwood Asylum, at Kingston, Ontario, was attacked by an insane patient on August 15th, while making his rounds, and fatally stabbed in the abdomen.

MR. LAWSON TAIT recently reported one hundred and twelve operations for ovarian and parovarian cysts, without a death and without listerism.

DR. J. J. M. ANGEAR has resigned the professorship of the Principles of Medicine in the College of Physicians and Surgeons, of Chicago.

DR. ALFRED MEADOWS says that no drug equals potassium bromide in controlling ovarian menorrhagia.

TYPHOID fever is reported to have again made its appearance at Plymouth, Pa.

The Louisville Medical News.

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THE ANTI-JENNERIANS.

But little more than four years since, smallpox was vigorously endemic over some large areas of London, England, playing havoc among the ignorant and unsanitary, who kept the disease alive for a long time and spread it in various quarters.

It was at this time that the anti-vaccination agitators were able to make their influence felt, and at their instance the world was treated to the extraordinary spectacle of a pestilence-ridden people rising in arms against the health authorities whose mission was to apply the only measure which could stay or mitigate the scourge. During this day of England's adversity, it was evident from signs, too legible, that on this side of the ocean we were destined soon to like experiences, and recent advices from Canada but too painfully show how well grounded was the augury. The city of Montreal is said to be, at this writing, afflicted with four thousand cases of smallpox, and a consequent death-rate of three hundred a week; while a great mob of unwashed and unvaccinated wretches, under the lead of a few crack-brained fanatics, defies the health officers and municipal rulers, drives

the physicians from the sick, demolishes drug-stores and printing houses, and threatens to wreak vengeance upon the better inhabitants, if it does not raze the town.

The military has been called out, and will probably soon bring order out of anarchy, with appropriate augmentation of the death-roll. The city will be spared further affliction at human hands, but the pestilence has doubtless gained impetus in the interregnum, the elements of contagion being scattered within her boundaries by the mob, and carried into the surrounding country by those who fled to escape its violence.

The terrible ordeal through which our sister city is passing holds a lesson which the officers and physicians of every municipality in the land should lay to heart without delay, for the questions, "who'll be the next, and what shall be done?" are too serious to be trusted to the temporizing spirit of the average local board of health.

The advance-guard of winter is already upon our northern border, and with its march southward smallpox may be expected to take root in every city and village which holds persons unprotected by vaccination. This is a trite fact; but the difficulties of obtaining a stock of trustworthy virus have of recent years multiplied, and constitute, in view of threatened invasion, not only a live issue, but a very serious one.

The original Jennerian seed seems to have been spent by too constant reproduction, and it is doubtful if to-day there can be found any where such virus as that which placed vaccination upon a firm, scientific basis, immortalized its discoverer, and made smallpox epidemics for three quarters of a century impossible in the civilized world.

The bovine make-shift of our day is at best a doubtful resource. The physician must use it in lieu of something better, but it fails utterly in many cases, and when it does take root its constitutional effects and prophylactic powers are most provokingly irregular and uncertain.

Meanwhile, the anti-vaccination preju-

dice grows apace, and will gather strength to the serious hurt of mankind, whenever and wherever vaccination fails of its perfect work. New York has an anti-vaccination society, and there are influential cranks all over the land who are making capital against this most beneficent of Medicine's gifts to man, and would be only too happy in time of pestilence to encourage the rabble in refusing vaccination, resisting the authorities, and turning order upside down.

The state of affairs in Montreal is a menace to every large city in America, and while the authorities are taking counsel as to the best methods of preventing or settling mobs, it would be well for the physicians to exchange opinions as to the best means of securing a stock of real Jennerian virus, which, if obtained and scattered over the land, would spare us all doleful apprehensions of the scourge and its consequences, and disarm the anti-Jennerians of one of their most effective weapons.

Bibliography.

A Text-Book of Medical Physics; for the use of Students and Practitioners of Medicine. By JOHN C. DRAPER, M. D., LL. D., Professor of Chemistry and Physics in the Medical Department of the University of New York, and of Natural History and Physiology in the College of the City of New York. With 377 illustrations. 8vo, pp. 733. Cloth. Philadelphia: Lea Brothers & Co. 1885.

This elegant and useful work bears ample testimony to the learning and good judgment of its eminent author. It is a fact long since conceded that the practitioner and student of medicine can find little time for the study of the intricate problems of physical science, and yet without a knowledge of such points as bear directly upon medicine, the physician will have but dim and shadowy notions of many of its important principles.

Dr. Draper has fitted his work admirably to the exigencies of the situation by avoiding the recital of tedious manipulations and the more abstruse and mathematical features of the subject, and presenting the reader with brief, clear, and simple statements of such propositions as he is by necessity required to master.

In illustration of the author's design and attainment, as above indicated, it may be noted that the sections devoted to the problems of electricity as applied to medicine, optics in reference to practical microscopy, and the methods of bacteriological study, though brief, are very comprehensive; while the cardinal principles of these great topics are so clearly set forth that the student may master them in a short time and with little difficulty. The subject-matter of this book is well arranged, liberally illustrated, and carefully indexed.

That the work will take rank at once among the school text-books is certain; and it is to be hoped that it will find place upon the shelf of the practical physician, where, as a book of reference, it will be found useful and agreeable.

Practical Therapeutics: a Compendium of Selected Formulæ and Practical Hints on Treatment. Systematically arranged, interleaved and copiously indexed. By EDWARD J. BERMINGHAM, M. D., Fellow and ex-Vice-President of the American Academy of Medicine, etc. New York: J. P. Bermingham, publisher, 1285 and 1287 Broadway. 1885.

This is a nicely-bound volume of 420 pages, and is made up of prescriptions and formulæ gathered from many sources, making a serviceable book to those desiring a volume of this kind. Many condemn the practice of using ready-made formulæ, and claim that cases should be treated according to the indications in each individual case. Nevertheless, every one is in the habit of using formulæ he has seen others use with success. The formulæ given in this work are taken from the practice of men of experience and reputation, and which have been found by them to be of service. Considerable labor and time must have been taken in making the collection. The type is good, and the interleaving useful for those who wish to preserve prescriptions which they have found to be of value. J. M. R.

The Southern Bivouac. Contents for October: Ante-Bellum Charleston, Paul Hamilton Hayne; A Muscian's Fancy, William H. Hayne; The Beginning of the Ku-Klux Klan, D. L. Wilson; *Ad Ministrum*, G. M. D.; The Pocahontas of the South, Alpheus Baker; Bragg and His Generals, From Liddell's Record; Our Folk, Emmeline Urmston; Woman's Rights,

Goldsborough; Bragg's Invasion of Kentucky, C. C. Gilbert; *Eheu Fugaces* (Translation from Horace), G. M. D.; To Posthumus (Translation from Horace), M. J. Wright; Carriston's Gift (Illustrated), Hugh Conway; The Eighth Kentucky at Pearl River, A. B.; Repulse of Wilson at West Point, F. L. Richardson. *Comment and Criticism*: The First Written Form of Government; The Battle of Franklin; Hadrian's Address to his Soul. *Editor's Table*: Sentiment and Politics; Education in the South. *Salmagundi*: General Jeff. Thompson; The Runaways; A Desperate Man; The Man of the 12th of May.

On Renal and Urinary Affections. By W. Howship Dickinson, M. D., Cantab., F. R. C. P., Physician to and Lecturer on Medicine at St. George's Hospital, Consulting Physician to the Hospital for Sick Children, Corresponding Member of the Academy of Medicine, New York. Miscellaneous Affections of the Urine and Kidneys. August number of Wood's Library of Standard Medical Authors for 1885. 8vo, pp. x and 343. New York: William Wood & Co. 1885.

Poisons: their Effects and Detection. A manual for the use of analytical chemists and experts, with an introductory essay on the growth of modern toxicology. By Alex. Wynter Blyth, M. R. C. S., F. C. S., etc., Public Analyst for the County of Devon, and Medical Officer of Health and Public Analyst for St. Marylebone. With tables and illustrations. Volume II. July number Wood's Library of Standard Medical Authors for 1885. 8vo, pp. 334; cloth. New York: William Wood & Co. 1885.

A complete Pronouncing Medical Dictionary, embracing the terminology of medicine and kindred sciences, with their signification, etymology, and pronunciation. With an appendix, comprising an explanation of the Latin terms and phrases occurring in medicine, anatomy, pharmacy, etc., together with the necessary directions for writing Latin prescriptions, etc. By Joseph Thomas, M.D., LL.D., author of the System of Pronunciation in Lippincott's "Pronouncing Gazetteer of the World," and Pronouncing Dictionary of Biography and Mythology, on the basis of Thomas's Comprehensive Pronouncing Medical Dictionary. One volume, imperial 8vo, pp. 844; cloth. Philadelphia: J. B. Lippincott & Co. 1886. For sale by John P. Morton & Co.

Selections.

THE TREATMENT OF CHRONIC BRIGHT'S DISEASE.—In an article on this subject in the Boston Medical and Surgical Journal, Dr. I. T. Dana, of Portland, Maine, gives the following specific indications for treatment:

1. One of the most important indications is to avert or reduce hyperemia and inflammation of the kidneys. With this end in view, a uniform and sufficient warmth of the surface of the body should be maintained. In this disease, and also where predisposition to it exists, when the large amount of blood normally present in the cutaneous capillaries is reduced by chilliness of the surface, a corresponding hyperemia of the renal capillaries is very likely to occur. In a case recently under my observation, of the typical parenchymatous nephritis form, the man owned and steadily worked upon a farm, located upon a narrow neck of land projecting out from the Maine coast into the sea, and commonly swept by cold and damp winds, often sudden and severe. Frequently, when covered with profuse perspiration, his skin would become chilled with the winds, and he had himself noticed an apparent connection between these experiences and the development of his trouble. A moderately warm and equable climate is a great advantage. A sufferer from this disease, who is so favorably circumstanced as to be able to avail himself of different climates for different seasons of the year, so that he can have the benefit of free out-of-door life all the year round without risk of becoming chilled, has his chances of prolonged and comparatively comfortable life thereby greatly increased. Woolen undergarments should be worn, thick enough to insure warmth without inducing sweating. A flannel nightgown is advisable in cold weather. In acute exacerbations of the disease, attended with increased heat, the patient should be kept in bed, between blankets, for days or weeks. The importance of maintaining a uniform warmth of skin in this affection does not seem to be fully appreciated by the average practitioner. Local applications to the lumbar regions are useful, such as leeching or cupping, followed by warm fomentations, especially when a sense of heat, and heaviness has arisen, with scanty secretion of urine. I have found advantage in large packs. Several thicknesses of towels may be used, large enough to thoroughly en-

velop the small of the back and come round somewhat freely upon the abdomen. These should be wrung out in tepid water, covered with oiled silk, or impervious paper, and bound firmly on with a flannel swathe. A small blanket, folded once, may then be wrapped and securely pinned around the body below the waist. These, having been worn for the night, are removed in the morning, the skin is sponged with cold water, and rubbed dry, and a flannel swathe is worn for the day. Mild diluent diuretics are sometimes called for.

2. A second indication is to unload the obstructed uriferous tubules of their accumulations. The thrown off and altered epithelial cells, transuded fibrine, extravasated corpuscles, and fatty debris, sometimes in the form of casts, frequently occlude the tubules and add to the existing disability of the kidneys. Simple diluents and mild diuretics are then needed, such as cream-of-tartar water, and pure natural waters like the Poland spring water. They should be drunk freely, and, by preference, on an empty stomach, so as to be quickly absorbed and pass off through the kidneys.

3. A third indication is to build up the blood and promote nutrition. Whether or not the blood is ever the starting point of the morbid process in the system, it is certainly true that the peculiar anemic look of the patient is often the first thing that arouses in the mind of the physician a suspicion of the true nature of the disease, while, in the advanced stage, the blood is constantly found impoverished and depraved to the last degree, and utterly unfit to maintain healthy nutrition. Of the large class of building-up remedies I will mention, as specially useful, the *mistura ferri et ammonii acetatis*, cod-liver oil, and malt. Judicious and persistent use must be made of this class of remedies.

4. A fourth indication is to improve the condition of the nerve-centers. The importance of this indication is specially plain in the cirrhotic form of the disease occurring in painters and others who have been exposed to poisoning by lead. Here the iodide of potassium, the dose of ten to twenty grains conveniently administered in half a tumblerful of Vichy water, may be given three times a day for long periods of time, with markedly good results. The same method is applicable to cases of syphilitic origin, or occurring in systems specifically infected. In such cases the corrosive chloride of mercury in small doses may be sub-

stituted for the iodide of potassium for the period of a few weeks, from time to time, with advantage. In some of the cirrhotic cases of unknown origin, I have found great benefit from the use of the chloride of gold and sodium, as suggested by Bartholow, in the average dose of the twelfth of a grain, in pill form, after each meal. I have seen periods of marked improvement of general condition and special relief of distressing nervous symptoms follow its use. Arsenic, in small doses, and the hypophosphites are sometimes useful.

5. The fifth indication is to promote the elimination of urea from the blood. In order to appreciate the importance of this indication we have only to remember that uremia constitutes the chief danger of the disease, a fatal apoplectic seizure being occasionally its first revelation; or, to call to mind the fearful sufferings of the paroxysms of uremic dyspnea, uremic headaches, and uremic convulsions. Here we must mainly rely upon vicarious evacuations by the skin and bowels, and I believe that sudorifics are the most valuable class of remedies. Profuse diaphoresis may be induced by hot air and hot vapor-baths, and by the internal administration of various drugs, of which *jaborandi* is by far the most valuable as an eliminator of urea from the blood. But the means, which I have found at once the most efficacious and convenient, is the hypodermic injection of pilocarpine. I have resorted to this method many times with the best results. The dose used is generally a quarter of a grain, the patient being in bed between blankets, and I usually find the entire surface of the body covered with a profuse sweat within the space of five minutes. When the process of diaphoresis is over the skin may be wiped dry and fresh clothes put on. The amount of the secretion is enormous, and the elimination of urea has been shown to be large. Great relief of the uremic symptoms is often obtained by the daily use of this method for a series of weeks. I have seen, in a case still fresh in my mind, headache, dizziness, dyspnea, unrest, marked impairment of vision, and heart irritability so largely and rapidly subside as to raise a doubt in the mind of friends, and even of the attending physician, as to the correctness of a diagnosis, unhappily fully confirmed by the later history of the case, and at last by the autopsy. I recommend the plan to my professional brethren, cautioning them to get an article of good quality.

6. A sixth indication is to evacuate dropsical accumulations. For this purpose mechanical methods are sometimes useful, such as acupuncture of the legs, prepuce, labia, etc., or a short incision over one of the malleoli. Tapping of the abdomen is generally to be avoided in renal dropsy. Erysipelas is specially liable to follow operative methods in this form of dropsy. Hydrogogue cathartics, which are often so well borne and so satisfactory in results in cardiac dropsy, are neither so safe nor so useful in the dropsy of Bright's disease. Sometimes, however, resort must be had to elaterium in suitable doses and combinations. Sometimes, making temporary use of the remaining powers of the kidneys, diuretics may be given, especially the infusion of digitalis with the iodide of potassium, or cream of tartar. But I believe that in this disease, not only for the elimination of urea but also for the evacuation of dropsical accumulations, the hypodermic use of pilocarpine is not only one of the safest, but also one of the most effective measures at our command. It is a good plan to alternate the various methods, laying the burden of vicarious service alternately upon the different organs. The Basham's mixture, above mentioned, besides being useful as a blood restorer, often acts as a gentle tonic-diuretic.

7. A seventh indication is to sustain the heart. It has been shown by Johnson, and others, that in the inflammatory forms of the disease the walls of the small arteries and capillaries are very constantly thickened and their caliber diminished. Indeed, it has even been proposed to call the disease an "arterio-capillary fibrosis." Associated with this vascular affection, if not indeed caused by it, is found hypertrophy of the left ventricle of the heart, which very generally at last undergoes fatty degeneration and dilatation. It is, therefore, a matter of great importance to save the heart, if possible, from all strain. No overexertion of body or mind should be allowed. Excitements of all kinds should be avoided, and tranquility of mind should be promoted. Digitalis and strychnine are perhaps the two drugs most used, from time to time, to strengthen the heart's action.

8. My last indication is to palliate the suffering of this distressing disease. The methods for this are in large measure involved, and have been mentioned under other heads. As much of the distress doubtless arises from uremia, so the most

lasting relief is that which comes from the elimination of the urea. I will mention a few items here. In the fits of dyspnea prompt relief is sometimes obtained from the hypodermic injection of the quarter of a grain of morphia with the hundred and twentieth of a grain of atropine. The nitrite of amyl quickly affords relief in some cases, a few drops being put upon a handkerchief and held to the nose. The same use of morphia and atropine is often useful in convulsions, restlessness, and general nervous disturbance of the advanced stages of the disease. For the headache and dizziness, a scruple of bromide of sodium in a teaspoonful of syrup of lactophosphate of calcium may be given three times a day, and, for the asomnia, thirty grains of bromide of potassium, with seven or eight grains of chloral at bedtime. For the uremic coma, I have found the hypodermic use of pilocarpine by far the most effective remedy.

For diet, as a rule, any articles of plain and simply cooked food may be allowed which the appetite inclines to and the stomach is able easily to dispose of. In some cases advantage is found in a restricted diet of milk, skim-milk, or butter-milk.

THE INFLUENCE ON SECOND LABORS OF THE LENGTH OF INTERVAL SINCE THE FIRST LABOR.—It is well known that a woman pregnant for the second time, when a long interval has passed since her first pregnancy, approaches her labor with greater anxiety, both for herself and her offspring, than the secundigravida whose first labor has occurred within a few years. It is also known that if the first labor has left behind no considerable injuries, the marks of it can sometimes so far disappear and the cervix, after a long interval, so regain its original appearance that it is often scarcely possible to tell, in the absence of a definite history, whether a given patient is a primigravida or whether she has given birth to a child some years previously. These two facts give rise to the conjecture that a second labor after a long interval may differ materially from ordinary second labors, and may perhaps resemble first labors. Since no attempt has hitherto been made to determine whether or not this conjecture is well grounded, Kleinwächter has set himself to find out whether, and in what way, long intervals between the first and second pregnancies exercise an influence on the second

gestation, the second labor, and the second puerperium.

The material on which the author based his observations embraced 397 secundigravidae, of which number 395 gave birth: of this number, 94 bore their second child after an interval of from six to sixteen years. From the tabulated statistics of these 395 cases, Kleinwächter has made the following interesting deductions:

1. Secundigravidae, with a long interval (six to sixteen years) since their first pregnancy, suffer during gestation both with accidental complications and with those dependent on the pregnant state much more frequently than those pregnant for a second time after a short interval (one to five years). The reverse appears to be the case with ante-partum hemorrhages.

2. A relative and absolute increase in the amount of liquor amnii is observed after a long interval much more frequently than after a short one: especially is this true after an interval of ten years or more.

3. The duration of second labors in general is in the average about 10.5 hours, and the relative length of the several stages to one another is about the same as with multiparæ generally. But secundiparæ after a long interval have a longer first stage than after a short interval, the other two stages remaining about the same. If, however, the interval is ten years or more, all three stages are considerably lengthened, and the labor lasts about as long as that of primiparæ: in fact the third stage in such cases appears to be even longer than in first labors. In other words, after a long interval the pains are more frequently weak and ineffectual than after a short interval.

4. Operative interference with second labors after a long interval is necessary twice as often as after a short interval, and tears of the perineum occur more frequently. Adherent placenta and post-partum hemorrhage are more frequently observed after a long interval.

5. Affections of the kidneys occur more frequently after long than after short intervals. Especially noticeable is the increased frequency of edema of the lower extremities without albuminuria, particularly after an interval of ten years or more.

6. The likelihood of mastitis diminishes with the length of the interval: so also does the probability that the mother will be able to suckle.

7. The morbidity and mortality per cent of puerperal disease rises considerably with

the increase of interval, and is especially high after an interval of ten years or more. There appears, however, to be no inclination to puerperal mania after a long interval.

8. The longer the interval, the more frequent the premature, spontaneous interruption of the pregnancy, especially when the interval is ten years or more. The probability of twin pregnancy increases with the length of interval, and so does the frequency of the birth of monstrosities.

9. The relative number of girls born of secundiparæ increases progressively with the length of interval; and the longer the interval, the heavier and longer is the infant.

10. With the increase of interval there is a progressively increasing mortality of children—the loss of fetal life embracing not only the still-born, but those who die within the first eight days.

In other words, it may be stated that with an increase of interval between the first and second labors, the second pregnancy will be more frequently attended with sickness and the ailments incidental to that condition, and premature labor will more frequently occur; the labor will be longer; instrumental interference will therefore be more frequently necessary; the perineum will oftener be torn; hemorrhage will more frequently follow, and the puerpera will more frequently sicken and die. Further, the longer the interval, the more frequently will twins be born, the greater will be the fetal weight and length, and the greater will be the number of still-born children and of those who perish within the first eight days. On the other hand, with an increased interval is a decreased frequency of ante-partum hemorrhage and of marked diminution in the amount of liquor amnii, a diminished functional activity of the mammary glands, a diminished tendency to puerperal mania, and finally a decreased number of male offspring.

If these conclusions are compared with a previous article of Kleinwächter's on *The Influence of Age on the Labor of Primiparæ*, it will be seen that, with few exceptions of secondary importance, the secundigravida with an interval of ten years or more finds herself under about the same relatively unfavorable circumstances as the old primiparæ; and the explanation of this fact, according to the author, is to be found in the increased age of the former; that is, that the consequences and influences of the first labor may disappear after a long period of years,

and that the woman who then becomes pregnant for a second time is virtually an old primipara.—*The Boston Medical and Surgical Journal.*

AN OPERATION FOR CYSTOCELE.—Dr. T. A. Reamy, in a paper read before the Cincinnati Obstetrical Society, thus describes his operation for cystocele (Medical and Surgical Reporter):

The patient is placed in the extreme lithotomy position, an assistant holding each lower extremity, and the posterior vaginal wall held back by Sims' speculum. The tissues are caught up by small double-toothed tenaculum forceps, and the cutting is done with long scissors, sharp pointed, curved on the flat, the same as used in perineorrhaphy. A constant stream of water, carbolyzed at 100° F., is allowed to play on the field of denudation. This controls hemorrhage and keeps the field clear. The denudation is modified in direction, width or length, as each case requires. If it is desirable to cut deeply, care must be taken to avoid the lateral branches. There is, however, no danger of this unless you carry the arms some distance out beyond the cervix. He had never encountered the accident, but theoretically the danger does exist. The lines of denudation should be sharply defined, so that when the sutures are tightened they shoulder against each other and union by first intention is secured. Ordinarily no cicatricial tissue is found in the line of union. It is quite true, as Thomas has said, that it is not material what direction the denudation may take, provided you get rid of sufficient redundant tissue, and take up the pouch that is present, for it will contract from all directions. You can readily see that the uterus is one fixed point, the meatus another, and the greatest amount of redundant tissue is situated just forward of the cervix.

If you carry the arms of your denudation on either side of the cervix, the direction of the contraction will be directly in harmony with the original construction of the parts, and the contraction, if you get union, will be in the very direction in which you desire to get support. Further, in this method the tissue can be safely subjected to greater traction than they can bear in any other method of procedure. In the clinical use of the method, you will find that you do not have to denude so large a field in order to get contraction, or rather no one path of denudation is so wide. As

you approach the urethra you can denude very deeply, but it is not necessary to go so deep there, as it is further up toward the bifurcation of the denudation. If, however, you simply take off the mucous membrane, and do not go through the muscular tissue of the vagina into the cellular tissue between the vagina and the bladder, the operation will fail, and because you can denude so deeply with safety by this plan is one of its chief advantages. In two cases in which I desired to cut deep, I have opened the bladder and formed a vesicovaginal fistula; but I closed it up at once with the sutures of the operation for cystocele, and nothing untoward occurred. Denude deeply, for the more deeply, within limits, the more certain you will be to get good results. As already stated, at the upper extremities of the denudation it is better not to go too deep on account of the ureters, but that danger, as already stated, I do not regard as great. The doctor usually placed as many as eight sutures to the linear inch of the denudation. The placing of the stitch, which draws the three arms of the Y together, is of importance. Even if the suture should go to the bladder it will do no harm. It is important to get the border surfaces united perfectly by first intention. The doctor uses the so-called silk-worm gut, out of which fish-lines are made. It is really made of the intestines of a fish; it is an animal ligature, and you can with ease render it perfectly aseptic. It is strong enough for any purpose of this sort. You can draw on it with almost your entire strength without breaking it. It is prepared for use by cutting the kinked ends off with the scissors, and throwing the rest into a carbolyzed solution (a ten or fifteen per cent solution in warm water), and in a half hour it is ready for use. Tie two or three knots, or it may come undone; but you may cut the ends short or long, as you please. Its advantages are smoothness, strength, and, if rendered aseptic, it is not followed by any more suppuration than a silver wire. It does not become too soft, it is not absorbed too soon, but remains like wire for weeks; cut ends do not jag the tissue.

After the operation the patient must be kept in bed, and a self-retaining catheter kept in the bladder constantly for eight or ten days, until union is complete. This I regard as essential, since the distension of the bladder, though it may not prevent union, will nevertheless prevent the union from occurring in the field of the operation

in the contracted state so favorable to good results. These remarks will seem to be of more importance if my recommendation is recalled to carry the denudation through the vaginal wall, at least near the center.

The doctor has operated after the method proposed in fifty cases, and thinks his experience warrants the claim that it possesses the following advantages:

1. Simplicity.
2. Less width of denudation is required at any given point in order to secure the necessary contraction after closure than in other methods.
3. The deep denudation necessary to cure in all cases can be done by this method with greater safety.
4. Since tension upon any one line of the operation after union is less than after any other methods, and since the deep denudation causes firm union, the good results are likely to be more permanent.
5. After cure the vaginal orifice and entire anterior wall of the vagina will conform more perfectly to the original.

A NEW BACILLUS.—Mr. Frank Cheshire, whose apiarian researches have been of extreme value and interest to both beekeepers and naturalists, describes (in the current number of the *Journal of the Royal Microscopical Society*) a new bacillus, which he believes to be the cause of the devastating disease known as "foul brood" among bees. This disease has for many years proved a veritable pest, large apiaries having in numerous instances been entirely swept away by it. In America alone the losses have been very great, carrying off hundreds of thousands of bees annually. It was thought that the disease was confined to the larvæ, that the grubs were infected by the antennæ of the nurses, who brought home the germs from a distance with their food; but Mr. Cheshire has discovered that in the imago the disease becomes chronic, and that the blood of the adult insect is also frequently loaded with bacilli. From a large number of observations he finds that the disease in the larva affects the blood, and quickly passes into every viscus. In the adult bee the chyle stomach is affected, notwithstanding the disease is not communicated through the honey, but through the air, the bacilli being largely diffused and taken into the system through the air tubes. Microscopists will have no difficulty in accepting the supposition that these organisms are carried about by every cur-

rent of air, and that bees will breathe them in and convey them from one apiary to another. When it is remembered that a single cubic inch of material would form a quadruple line of bacilli extending from London to New York, there is no difficulty in comprehending the danger of infection in this way. Ordinary dust motes are to such organisms as hens' eggs are to grains of sand. Many of the larvæ have been found to contain at least 1,000,000,000 bacilli, so that the means by which they are disseminated are likely to be very varied. The new bacillus, to which Mr. Cheshire has given the name of *Bacillus alvei*, has been cultivated and carefully studied by Mr. Watson Cheyne, and it appears to him to have specific characters. It multiplies mainly by fission, and has a somewhat conical, stained point at one end, although separated by a marked division. This is not the common mode of growth by fission by these bodies; ordinarily the rod divides into two pretty equal halves; in *Bacillus alvei* it does not; the minute prolongation at one end is peculiar and remarkable. Under cultivation it is seen to grow in colonies; these assume a pear-shape, and grow rapidly in cultivating materials—gelatine being the best—kept at the body temperature. A minute drop of juice taken from the body of an infected larva, and examined under a power of 600 diameters, exhibits thousands of bacilli in a state of great activity. Mr. Cheyne believes with Mr. Cheshire: "No doubt can be entertained that this bacillus is new to science, and is the cause of 'foul brood' in the hive-bee." We can only add that the paper is accompanied by two full-page lithographic plates of the bacillus in its various stages of development, and which seem to ourselves to warrant this assertion.—*Medical Press*.

HEREDITY OF PHTHISIS.—Izaak Johannes Hage (Akad. Prof. Schrift., Leyden, Holland, *Schmidt's Jahrbucher*), under the title, *Sets over de Hérediteit der Phthisis*, considers the following questions:

1. What is the connection between the hereditary phthisis and that otherwise acquired?
2. Has the father or the mother the greatest influence in developing hereditary phthisis?
3. Does phthisis descend more from father to son, and mother to daughter, or conversely?
4. At what period of life does hereditary phthisis make its first manifestations?

5. Is the factor of heredity greater or less in the country as compared with the city?
6. Is there a difference in regard to heredity in the sexes in the city or country?

After consulting the literature of all languages, and the reports of public and private institutions and leading authors in a manner too complete to consider here, the writer came to the following conclusions:

1. About three fourths of the patients treated made satisfactory statements concerning their family history.
2. Somewhat less than half of the patients descended from phthisical parents.
3. The influence of the mother in the origin of hereditary phthisis is about four fifths that of the father.
4. Hereditary phthisis descends mostly from father to daughter, but quite as often from father to son as from mother to son, and least of all from mother to daughter.
5. The first manifestations of the disease appear both in cases which are hereditary and in those which are not hereditary twice as often before as after the thirtieth year.
6. With reference to the time of life the endurance of the disease is greatest, there is no difference as to before or after the thirtieth year.
7. Heredity is as great in the country as in the city.
8. With men the heredity is greater in the city than in the country; with women the converse is true.—*Medical and Surgical Reporter*.

SUTURING THE INTESTINES.—Mr. E. Stanmore Bishop, F. R. C. S., of Manchester, contributes an interesting and important paper on Enterorrhaphy to the current number of the *Medical Chronicle*, in which he describes a new form of intestinal suture designed by himself, and most successfully performed on several animals in which portions of intestine had been experimentally excised. The value of the essay is materially added to by the introduction of a plate containing illustrations of all the sutures hitherto employed by various surgeons in uniting the divided intestine. Mr. Bishop, after securing the loop of intestine by means of a special clamp invented by himself, cuts away the portion to be removed by scissors, along with a triangular piece of mesentery, and the mesenteric arteries are ligatured over a flat sponge. The ends are next thoroughly cleaned and approximated, and the mesentery united by a few catgut sutures. Next a fine needle, threaded exactly

in the center of a piece of fine Chinese silk 160 centimeters long, is passed from right to left through the lower edge of both sides of the intestine, as near as possible to the mesentery. The double thread is then drawn through until 6 cms. remain on the right side. One of the threads of the left side is to be cut 6 cms. long; the needle is then passed from left to right through the same fold at a distance of 20 cms. from the first puncture. Two free ends and a loop remain on the left side, two ends free, and two connected with the needle on the right. By gently drawing upon the loop, one of each of the two last pairs is seen to move; these are then drawn up so as to bury the loop in the mucous membrane on the left side, and are seized and knotted on the right; the two ends are then cut off close to the knot. The free thread left in the first puncture is now drawn under the free extremities of the upper bars of the clamp, so as to be out of the way, and is reserved for the latter part of the operation. The needle is now carried back again from right to left through the base of the fold, and a similar loop is thus formed, this time on the right, and knotted on the left. In this way, as the suture progresses, stitches, consisting each of a single thread tied alternately on the right and left sides, are formed, the threads of each loop passing through the same punctures as those of its neighbors on each side. It is thus impossible that any part of the intestinal circumference shall be unguarded, except the minute openings made by the needle, and filled in by the threads. Extravasation at these points, moreover, will be prevented by swelling of mucous membrane; in addition, the threads are really within the lumen of the intestines, where as well the knots are situated, and thus the objections to previously described sutures are avoided.—*Medical Press*.

HEMORRHAGE FROM THE UMBILICAL CORD.

In 1881, September 22d, I was called to attend in her fourth confinement, Mrs. M., who in a few minutes after my arrival (having been in labor about one hour) was delivered of a large, healthy, female child, which was washed and dressed before I left the house. Shortly after reaching home, distance about half a mile, I received a message to return, as the babe's clothing was becoming wet with blood. On reaching the house, I found the babe's clothing in region of cord well saturated with blood, and upon removing them found the hemor-

rhage had ceased, cord well ligated. I made traction on the cord and examined it without finding any evidence as to where the hemorrhage came from. Thinking that the cord might not be thoroughly ligated, I applied another ligature. The nurse proceeded to dress the babe with dry clothing, and I left, but was not in my office half an hour until I received another call, and upon reaching my little patient I found the hemorrhage had been greater than the first, and the child almost lifeless. Again removing every thing, I found the hemorrhage had ceased, and the cord and surrounding parts were clean and dry, the clothing having absorbed the blood; being satisfied that the cord was thoroughly ligated, I again examined along the cord and point of attachment to the abdominal wall, which was very much retracted, with heavy folds of skin around it. I failed to find a point from which the hemorrhage came, and was about to pass the babe to the nurse, when there commenced to ooze up along the cord upon the left side some blood. Without disturbing the parts, I passed my artery forceps down along the cord, took a free grasp of the parts on that side, drew them up enough to get a silk ligature on, after which we had no more hemorrhage, and with good care the babe recovered.—*J. C. Claudy, M. D., in Medical and Surgical Reporter.*

THE SURGERY OF THE KIDNEY.—The surgery of the kidney is rapidly increasing in importance and amount. I find, on referring to my records of the operative cases in which I have assisted Mr. Tait, that there are notes of four cases of nephro-lithotomy, three of nephrectomy, and one of nephrotomy done by Mr. Tait during the last half year. There is not space for me to enter fully into the details of these cases, nor should I, perhaps, be justified in so doing for other reasons, but I may formulate some of the ideas that occur to me as the outcome of what reading and practical experience have fallen to my share.

1. That the surgery of the kidney suffers at present from neglected cases of large, chronic, suppurating, renal tumors, due to renal calculus, the kidney being too large for easy removal, and at the same time too much disorganized for any hope of recovery of function.

2. That these, if large and in debilitated subjects, are probably best treated by free incision and drainage before undertaking the operation of nephrectomy.

3. That nephrectomy in a kidney of moderate size is often a much easier operation than nephro-lithotomy, and that the kidney will come out from beneath its capsule when it is difficult to remove it with its capsule.

4. That nepro-lithotomy ought to be advised as soon as a tumor can be detected in the lumbar region, which, co-existing with urinary signs, symptoms, and history, renders the diagnosis possible, and in the majority of cases the diagnosis is not difficult.

5. That if this were done, as it will be, the calculus or calculi would probably be much more easily removed than is now generally the case, and nepro-lithotomy would become a remarkably satisfactory and safe operation, preserving both kidneys to the patient in a sound condition.—*John W. Taylor, F. R. C. S., in Birmingham Medical Review.*

A LIGHT-MINDED lay contemporary suggests as a suitable locality for hay-fever patients Mount Catarrhdin.—*Boston Medical and Surgical Journal.*

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department of the United States Army, from September 20, 1885, to September 26, 1885:

PROMOTIONS.—*Lt.-Col. T. A. McParlin*, Assistant Medical Purveyor, to be Surgeon with the rank of Colonel, to date from September 16, 1885. *Maj. B. J. D. Irwin*, Surgeon, to be Assistant Medical Purveyor with rank of Lieutenant-Colonel, to date from September 16, 1885. *Capt. B. F. Pope*, Assistant Surgeon, to Surgeon with rank of Major, to date from September 16, 1885.

APPOINTMENT.—*Edward R. Morris*, to be Assistant Surgeon with rank of First Lieutenant, to date from September 17, 1885.

Capt. F. C. Ainsworth, Assistant Surgeon, from Department Texas to New York City, for duty as recorder of the Army Medical Examining Board. (S. O. 214, A. G. O., September 18, 1885.) *Capt. G. W. Adair*, Assistant Surgeon, granted leave of absence for one month with permission to apply for one month's extension. (S. O. 104, Dept. Dak., September 18, 1885.) *Capt. William C. Shannon*, Assistant Surgeon, granted leave of absence for four months, to take effect about October 1, 1885. (S. O. 215, A. G. O., September 19, 1885.) *First Lt. Geo. E. Bushnell*, Assistant Surgeon, ordered from Department Dakota to Department East. (S. O. 219, A. G. O., September 24, 1885.)

OFFICIAL LIST of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service for the week ended September 26, 1885.

Austin, H. W., Surgeon, to proceed to Burlington, Vermont, on special duty. September 23, 1885.